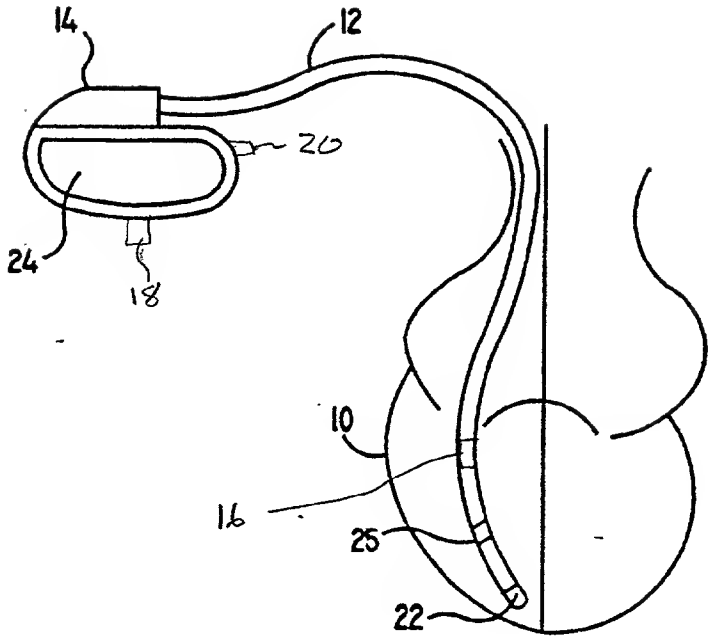

FIG. 1

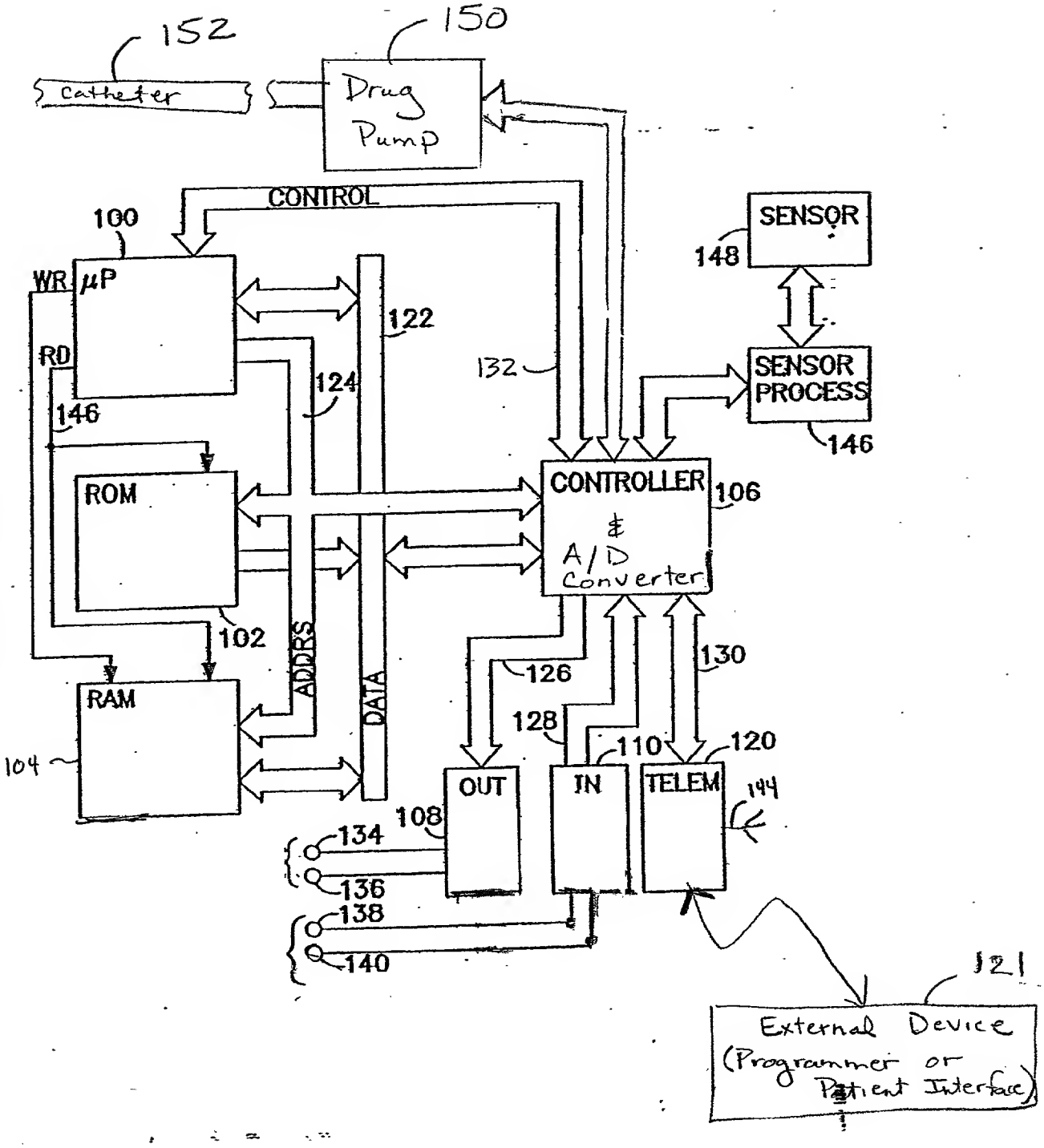
152
150
Catheter
Drug Pump
CONTROL
100
SENSOR
148
WR
μP
122
RD
124
132
SENSOR PROCESS
146
146
ROM
CONTROLLER & A/D Converter
106
102
ADDRS
DATA
126
130
RAM
104
128
110
120
OUT
IN
TELEM
144
108
134
136
138
140
121
External Device (Programmer or Patient Interface)

Figure 2

FOREIGN PATENT DOCUMENT

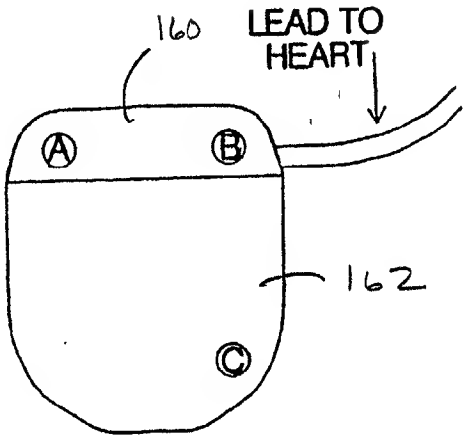

FIG. 3A

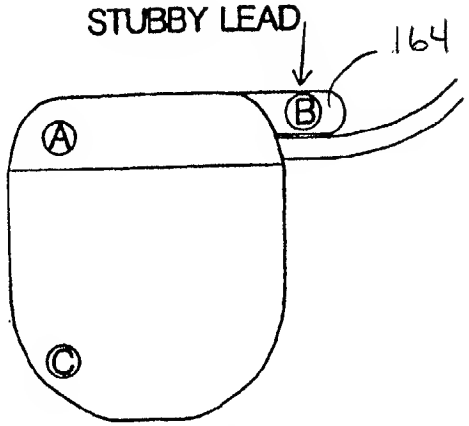

FIG. 3B

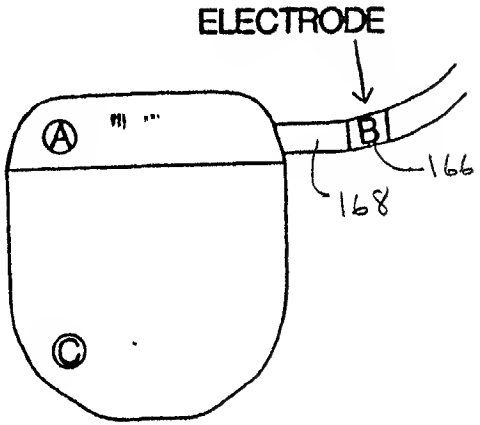

FIG. 3C

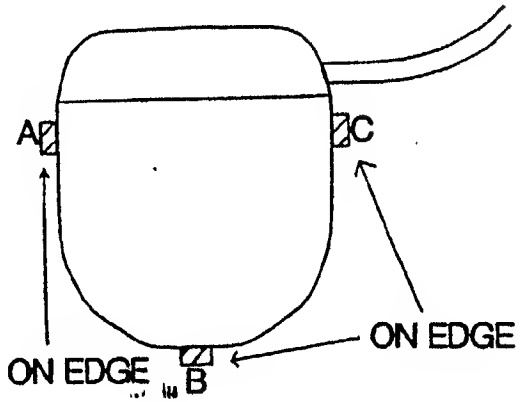

FIG. 3D

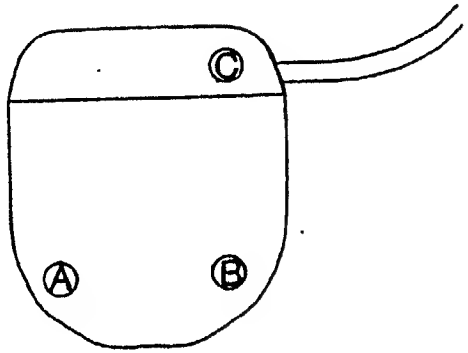

FIG. 3E

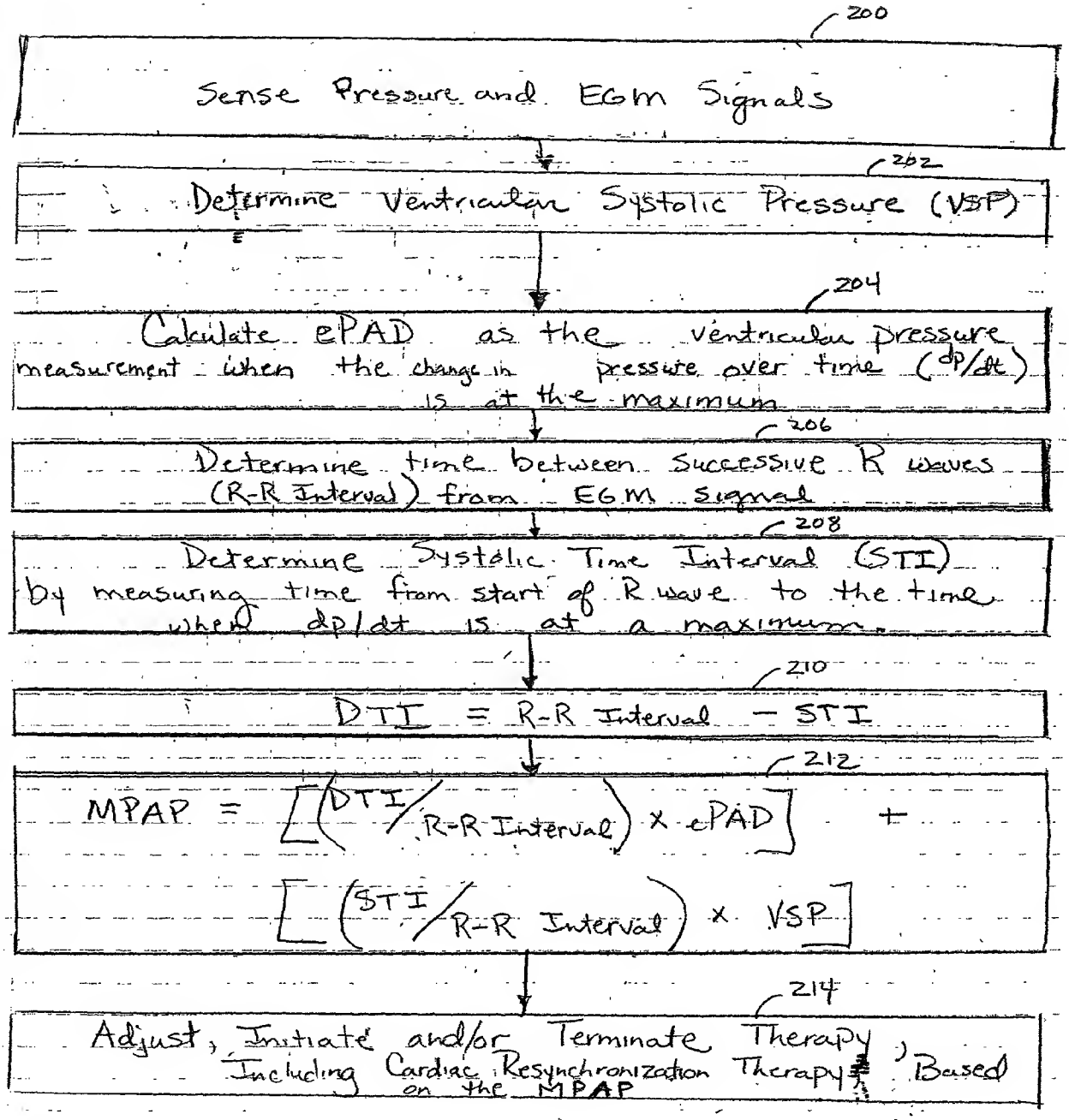
200
Sense Pressure and EGM Signals
202
Determine Ventricular Systolic Pressure (VSP)
204
Calculate ePAD as the ventricular pressure measurement when the change in pressure over time (dP/dt) is at the maximum
206
Determine time between successive R waves (R-R Interval) from EGM signal
208
Determine Systolic Time Interval (STI) by measuring time from start of R wave to the time when dP/dt is at a maximum.
210
DTI = R-R Interval − STI
212
MPAP = [(DTI / R-R Interval) x ePAD] + [(STI / R-R Interval) x VSP]
214
Adjust, Initiate and/or Terminate Therapy, Including Cardiac Resynchronization Therapy, Based on the MPAP

Figure 4

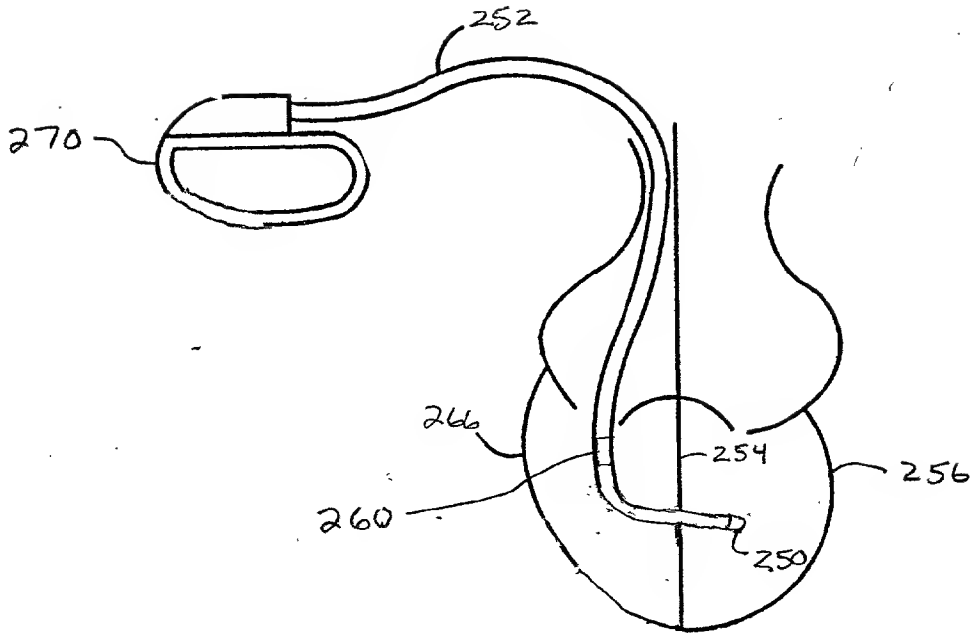

FIG. 5

Object Rejected

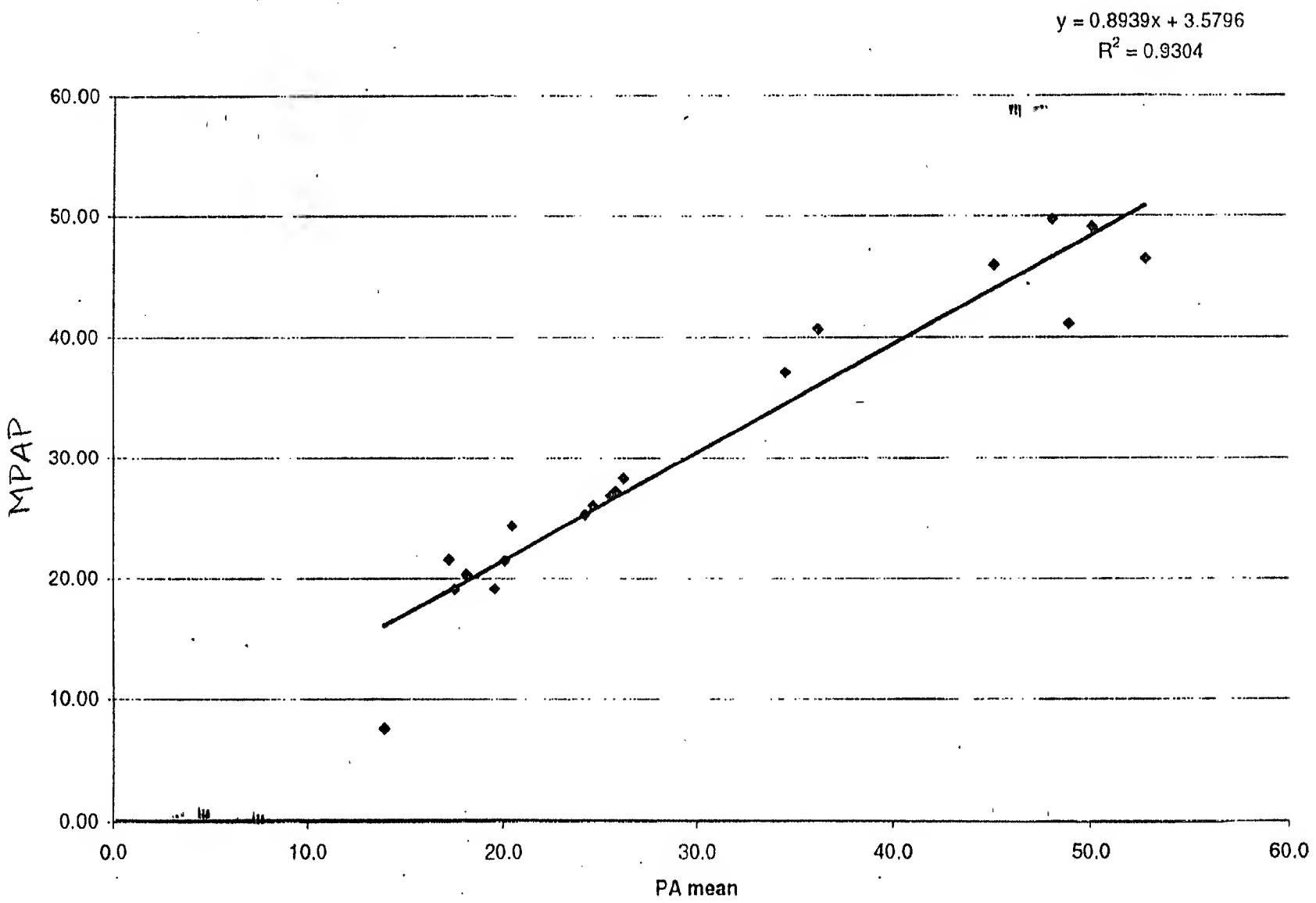

Figure 6